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Annual Index – 1983

Author Index A — L

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PREFACE

This annual index of Mathematical Reviews is included with each subscription and is available separately. It is also called Vol. 15 of the Index of Mathematical Papers (IMP). Vols. 6–9 of IMP are the annual indexes of MR for the years 1974–77, and are available as a set. The 1978 annual index was the first to be included with each subscription. There are cumulative author indexes to MR that cover 1940–59, 1960–64 and 1965–72, and cumulative author and subject indexes for 1973–79.

Items are classified according to the 1980 Mathematics Subject Classification. A copy of this classification is printed in the back of the subject portion of this index.

The entries in the author and key indexes give full bibliographic information about all items reviewed in MR. These entries are accompanied by MR numbers and classification numbers; secondary classification numbers are given in parentheses. In the subject index, an item listed under its secondary classification has the MR number given in parentheses. A star (★) preceding a title indicates a book, or other item which is not a periodical, that is reviewed as a whole.

ALPHABETICAL ORDER; SEPARATE KEY INDEX

Reviewed items are listed alphabetically by author; items having several authors are listed in full under each author (this was not done in the 1940–72 cumulative indexes). Surnames consisting of more than one part (e.g., de Branges, van der Corput) are listed under the first capital letter. Collections, proceedings and other similar publications that may have editors but do not have specific authors are given alphabetically by title in a separate list (called the "Key Index") following the author index.

CROSS-REFERENCES

There are three kinds of cross-references in this index.

(a) *Name variations.*

An author's primary name is the variation of the name which MR has chosen on the basis of frequency and currency of usage. We usually list all items by a given author under that author's primary name, and cross-references to the primary form are given from sufficiently distinct alternative forms of the author's name that have been used in items reviewed.

(b) *Authors in other capacities.*

In the author index, the names of persons associated with an item in a capacity other than that of author (e.g., editor, translator, subject of a biography, etc.) are also listed. In the subject index, such names are given in parentheses in the positions that they would occupy had they been authors. In both indexes these items occur only as cross-references to complete listings.

(c) *Key entries.*

Certain collections that are listed under their titles, described in section 1 above, are also listed under other headings, called "key entries". For example, the publication entitled *Proceedings of the Conference on Approximation Theory* is listed under "Proceedings: Conference on Approximation Theory" and also under the heading "Conference: Approximation Theory" and under the place and date of the meeting. These listings are not true cross-references, since a complete entry appears under each heading. However, there are such "key entries" that are cross-references: e.g., a cross-reference to an author if his paper contains an extensive bibliography, an obituary notice or reference to a special event.

ARRANGEMENT OF ENTRY

The full entries under a given heading (i.e., the primary name of an author, or a title) are listed in order of nominal publication dates; the cross-references are in MR number order after the full entries. For this purpose coauthored items are treated on the same basis as those written by the author alone.

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The arrangement of each title entry is that of the heading of the review in MR. All titles not in English are given in English translation (with the language of the original following in parentheses and accompanied by the mention of the summaries in other languages). Book and monograph titles in languages other than English are given in the original language or in a transliteration from the original; the title is then followed by the language of the original, in parentheses, and an English translation of the title, in brackets.

The general form for title entries is as follows:
Books, Monographs: Title. (Language of original {if necessary}) [English translation of title {if necessary}] Miscellaneous information {edition, editors, translators, series, etc.}. Publisher, city, date. Pagination. (Reviewer's name) Review number.

Journal article: Title of article. (Language of original {if necessary}. Summaries in languages other than the original {if necessary}) Journal abbreviation {including series number if necessary} volume number(volume number in first series if given) (nominal date), issue number {if necessary}, first page–last page (imprint date). (Reviewer's name) Review number.

The first part of the review number refers to the issue in which the review was published and the second part refers to its position within the issue. The first two digits of the second part are the general subject classification.

TRANSLITERATION

Since 1983, MR has used the Cyrillic transliteration in use by ANSI, LC, Zbl, ISI, and others. A table showing the details is at the end of the author/key index.

NAMES OF CHINESE AUTHORS

The name of a Chinese author is placed in the index as though it were in Western form. For example, Hua Luo-geng will be listed as Hua, Luo Geng, as though the author's name were L. G. Hua (in Western form). The pinyin transliteration is used for Mainland Chinese authors and the Wade-Giles transliteration is used for Taiwanese authors.

CONCLUSION

In an undertaking of this size errors are inevitable, despite elaborate precautions and checks. The editors of Mathematical Reviews would be very glad to have their attention drawn to errors in this index and also in the earlier indexes.

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(*with* Börger, Egon) The equivalence of Horn and network complexity for Boolean functions. *Acta Inform.* **15** (1981), *no.* 3, 303–307. (Authors' summary of the first paper) **83h:03048a** 03D15 (03G05, 68C25, 94C10)

(*with* Börger, Egon; Gurevich, Yuri) Prefix classes of Krom formulae with identity. (German summary) *Arch. Math. Logik Grundlag.* **22** (1982), *no.* 1-2, 43–49. (M. R. Krom) **83m:03019** 03B25 (03B10, 03B35, 03D35)

(*with* Börger, Egon; Lewis, Harry R.) Conservative reduction classes of Krom formulas. *J. Symbolic Logic* **47** (1982), *no.* 1, 110–130. (G. Asser) **83e:03021** 03B10 (03D35)

Ääremaa, Ruth A possibility for realization of cluster analysis. (Russian. English summary) *Tartu Riikl. Ül. Toimetised No.* 591 (1981), 158–162. (Author's summary) **83i:92057** 92A90

Aaronson, Jon An ergodic theorem with large normalising constants. *Israel J. Math.* **38** (1981), *no.* 3, 182–188. (Radu Nicolae Gologan) **83f:28014** 28D05 (60F15)

(*with* Keane, Michael) The visits to zero of some deterministic random walks. *Proc. London Math. Soc.* (3) **44** (1982), *no.* 3, 535–553. (Robert Kertz) **83j:28016** 28D05 (10K10, 60J15)

Aase, Knut Kristian Model reference adaptive systems applied to regression analysis. *Statist. Neerlandica* **35** (1981), *no.* 3, 129–155. (C. R. Rao) **83c:62102** 62J05 (62M10)

Stochastic continuous-time model reference adaptive systems with decreasing gain. *Adv. in Appl. Probab.* **14** (1982), *no.* 4, 763–788. (H. J. Kushner) **83m:93068** 93E12 (62M05)

Aatre, Vasudev K. ★Network theory and filter design. A Halsted Press Book. *John Wiley & Sons, Inc., New York*, 1981. vii + 436 *pp. ISBN* 0-470-26934-0 (From the preface) **83j:94001** 94–01 (93–01)

Abad, Manuel Cyclic Post algebras of order *N*. *An. Acad. Brasil. Ciênc.* **53** (1981), *no.* 2, 243–246. (R. Cignoli) **83d:06011** 06C20 (03G20, 08B20)

Abailard, Peter *See* **Maloney, J. Christopher, 83g:01014**

Abakarov, D. I. (*with* Oleinik, V. P.) On the theory of quantum processes in a dispersive medium separated from a vacuum by a plane boundary. (Russian) *Kvantovaya Èlektronika No.* 18 (1980), 74–86, 116. (Authors' summary) **83d:81128** 81L05

Abakuks, Andris (*with* Prajneshu) An optimal harvesting policy for a logistic model in a randomly varying environment. *Math. Biosci.* **55** (1981), *no.* 3-4, 169–177. (Tore Schweder) **83f:92055** 92A15 (34A05, 34C05)

Abakumov, A. I. Optimal harvesting problems in a population with an age structure. (Russian) Control and optimization in ecological systems. *Voprosy Kibernet. (Moscow) No.* 52 (1979), 27–48. (Author's summary) **83c:92078** 92A17 (49A34, 92A15)

(*with* Alekseev, B. V.) On an approach to the solution of the Schrödinger equation. (Russian) *Dokl. Akad. Nauk SSSR* **262** (1982), *no.* 5, 1100–1102. (Woodford W. Zachary) **83e:81019** 81C05 (65P05, 81F20)

Abakumov, Yu. G. A multipoint problem of P. P. Korovkin: formulation of the problem. (Russian) *Application of functional analysis to approximation theory, pp.* 3–7, 147, *Kalinin. Gos. Univ., Kalinin*, 1981. (Author's summary) **83h:41035** 41A99

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Abarbanel, Henry D. I. Using field theory in hadron physics. *Recent developments in particle and field theory (Sympos. Particles and Fields, Tübingen Univ., Tübingen*, 1977), *pp.* 1–41, *Vieweg, Braunschweig*, 1979. (From the introduction) **83e:81085** 81G05 (81–02)

Nonlinear diffusion in Hamiltonian systems exhibiting chaotic motion. *Phys. D* **4** (1981/82), *no.* 1, 89–104. (Author's summary) **83b:58031** 58F05 (58F13, 70K50)

(*with* Latham, Peter E.) Finite resolution approximation to the asymptotic distribution for dynamical systems. *Phys. Lett. A* **89** (1982), *no.* 2, 55–58. (Authors' summary) **83e:58059** 58F14 (70K50)

Abarbanel, Saul (*with* Gottlieb, David) On improving the 2-4 two-dimensional leap-frog scheme. *SIAM J. Sci. Statist. Comput.* **1** (1980), *no.* 4, 426–430. (From the introduction) **83a:65080** 65M10

Abatangelo, L. Maria Complete caps in a Galois space PG(3, *q*), *q* even. (Italian. English summary) *Atti Sem. Mat. Fis. Univ. Modena* **29** (1980), *no.* 2, 215–221. (Brian J. Wilson) **83e:51014** 51E20 (05B25)

(*with* Raguso, Grazia) A graphical characterization of the *k*-arcs in an odd-order Galois plane that turn out to be ovals of a proper subplane. (Italian. English summary) *Note Mat.* **1** (1981), *no.* 1, 1–17 (1982). (Alessandro Bichara) **83j:05018** 05B25 (51E20)

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On the number of points caps obtained from an elliptic quadric of PG(3, *q*). *European J. Combin.* **3** (1982), *no.* 1, 1–7. (Raymond Hill) **83e:05029** 05B25 (51E20)

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Abatzoglou, T. (*with* O'Donnell, B.) Minimization by coordinate descent. *J. Optim. Theory Appl.* **36** (1982), *no.* 2, 163–174. (Marco Gaviano) **83j:90075** 90C30 (49D37)

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Abbas, A. (*with* Bryan, Alan C.; Stuart, Allan E. G.) A class of nondispersive evolution equations with solitary wave solutions. *Lett. Math. Phys.* **6** (1982), *no.* 1, 43–47. (J. J. Mahony) **83h:35137** 35Q20 (76B25)

Abbasov, R. Z. (*with* Makhmudov, A. P.) Theorems on integral inequalities in Riemann-Stieltjes integrals and their applications. (Russian) *Dokl. Akad. Nauk SSSR* **265** (1982), *no.* 5, 1069–1073. (L. Losonczi) **83k:26012** 26D10

Abbasova, S. S. A variational method in Hilbert space. (Russian. English and Azerbaijani summaries) *Izv. Akad. Nauk Azerbaĭdzhan. SSR Ser. Fiz.-Tekhn. Mat. Nauk* **1** (1980), *no.* 5, 28–32. (Author's summary) **83e:49009** 49A27

Abbati, M. C. (*with* Manià, A.) A spectral theory for order unit spaces. *Ann. Inst. H. Poincaré Sect. A (N.S.)* **35** (1981), *no.* 4, 259–285 (1982). (C. Martin Edwards) **83d:46005** 46A40 (46L99, 81B99)

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Abbott, H. L. (*with* Katchalski, M.; Liu, Andy C. F.) An extremal problem in graph theory. II. *J. Austral. Math. Soc. Ser. A* **29** (1980), *no.* 4, 417–424. (From the text) **83a:05076b** 05C35 (05A05)

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Fam Ki An' *See* **Pham Ky Anh**

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